

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. **(Cancelled)**
2. **(Currently Amended)** ~~A process according to Claim 1, A~~
process for preventing damage inside a printing machine caused by microwave radiation emanating from microwave mechanisms, preferably microwave fuser mechanisms (3), comprising: an undesired effect of the microwave radiation is automatically detected, and limiting said detected undesired effect by countermeasures, wherein an incorrect paper weight of a printing medium is detected.
3. **(Currently Amended)** ~~A process according to Claim 1, A~~
process for preventing damage inside a printing machine caused by microwave radiation emanating from microwave mechanisms, preferably microwave fuser mechanisms (3), comprising: an undesired effect of the microwave radiation is automatically detected, and limiting said detected undesired effect by countermeasures, wherein a prolonged presence of printing medium in the area of the microwave mechanism (3) is detected.
4. **(Original)** A process according to Claim 3, wherein detection is optically accomplished by at least one optical sensor.
5. **(Original)** A process according to Claim 3, wherein detection is acoustically accomplished by at least one acoustical sensor.

6. **(Currently Amended)** ~~A process according to Claim 1, A~~
process for preventing damage inside a printing machine caused by microwave
radiation emanating from microwave mechanisms, preferably microwave fuser
mechanisms (3), comprising: an undesired effect of the microwave radiation is
automatically detected, and limiting said detected undesired effect by
countermeasures, wherein a change in the temperature of the printing medium is
detected.

7. **(Original)** A process according to Claim 6, wherein the
change in temperature is optically detected.

8. **(Original)** A process according to Claim 6, wherein the
change in temperature is detected by detection of a change in the reverse power of the
microwave mechanism (3).

9. **(Currently Amended)** ~~A process according to Claim 1, A~~
process for preventing damage inside a printing machine caused by microwave
radiation emanating from microwave mechanisms, preferably microwave fuser
mechanisms (3), comprising: an undesired effect of the microwave radiation is
automatically detected, and limiting said detected undesired effect by
countermeasures, wherein an electrical discharge inside the microwave mechanism
(3) is detected.

10. **(Original)** A process according to Claim 9, wherein an
electrical discharge is optically detected.

11. **(Currently Amended)** A process according to Claim ~~10, 9,~~
wherein an electrical discharge is electrically detected.

12. **(Currently Amended)** A process according to Claim ~~11, 9,~~
wherein an electrical discharge is acoustically detected.

13. **(Currently Amended)** ~~A process according to Claim 1, A~~
process for preventing damage inside a printing machine caused by microwave
radiation emanating from microwave mechanisms, preferably microwave fuser
mechanisms (3), comprising: an undesired effect of the microwave radiation is
automatically detected, and limiting said detected undesired effect by
countermeasures, wherein as a countermeasure, burning of the printing medium is
suppressed.

14. **(Original)** A process according to Claim 13, wherein burning
of the printing medium is suppressed by interrupting the oxygen supply.

15. **(Original)** A process according to Claim 13, wherein burning
of the printing medium is suppressed by mechanical suppression.

16. **(Cancelled)**

17. **(Currently Amended)** ~~Apparatus according to Claim 16, An~~
apparatus for the prevention of damage inside the printing machine caused by
microwave radiation emanating from microwave mechanisms (3), preferably
microwave fuser mechanisms, comprising: at least one detection mechanism for the
detection of an undesired effect of microwave radiation, and at least one mechanism
for the execution of suitable countermeasures in response to detection of an undesired
effect by said at least one detection mechanism, wherein a paper weight detection
mechanism (12) is provided, preferably in the area upstream from said microwave
mechanism (3).

18. **(Currently Amended)** ~~An apparatus according to Claim 16,~~
An apparatus for the prevention of damage inside the printing machine caused by
microwave radiation emanating from microwave mechanisms (3), preferably
microwave fuser mechanisms, comprising: at least one detection mechanism for the
detection of an undesired effect of microwave radiation, and at least one mechanism
for the execution of suitable countermeasures in response to detection of an undesired

effect by said at least one detection mechanism, wherein a paper jam detection mechanism is provided in the area of said microwave mechanism (3).

19. **(Original)** An apparatus according to Claim 18, wherein said paper jam detection mechanism includes at least one optical sensor.

20. **(Original)** An apparatus according to Claim 18, wherein said paper jam detection mechanism includes at least one acoustical sensor.

21. **(Cancelled)**

22. **(Currently Amended)** ~~An apparatus according to Claim 21, wherein~~ An apparatus for the prevention of damage inside the printing machine caused by microwave radiation emanating from microwave mechanisms (3), preferably microwave fuser mechanisms, comprising: at least one detection mechanism for the detection of an undesired effect of microwave radiation, and at least one mechanism for the execution of suitable countermeasures in response to detection of an undesired effect by said at least one detection mechanism, wherein said detection mechanism includes at least one temperature detector, said temperature detector includes including optical elements for detecting optical changes of the printing medium that are a function of temperature.

23. **(Currently Amended)** ~~An apparatus according to Claim 21, wherein~~ An apparatus for the prevention of damage inside the printing machine caused by microwave radiation emanating from microwave mechanisms (3), preferably microwave fuser mechanisms, comprising: at least one detection mechanism for the detection of an undesired effect of microwave radiation, and at least one mechanism for the execution of suitable countermeasures in response to detection of an undesired effect by said at least one detection mechanism, wherein said detection mechanism includes at least one temperature detector, said detection mechanism includes including power measurement elements for detecting reverse power of said microwave mechanism (3).

24. **(Currently Amended)** ~~An apparatus according to Claim 16,~~
An apparatus for the prevention of damage inside the printing machine caused by microwave radiation emanating from microwave mechanisms (3), preferably microwave fuser mechanisms, comprising: at least one detection mechanism for the detection of an undesired effect of microwave radiation, and at least one mechanism for the execution of suitable countermeasures in response to detection of an undesired effect by said at least one detection mechanism, wherein said at least one mechanism for executing countermeasures is located in the area of said microwave mechanism (3), preferably in the area downstream from said microwave mechanism (3).

25. **(Original)** An apparatus according to Claim 24, wherein said at least one countermeasure mechanism incorporates a gas flooding mechanism (13) that includes at least those areas of said microwave mechanism (3) in which printing media are located.

26. **(Original)** An apparatus according to Claim 24, wherein said at least one countermeasure mechanism includes mechanical suppression for suppressing burning of the printing medium.

27. **(Cancelled)**

28. **(Currently Amended)** ~~An apparatus according to Claim 27,~~
~~wherein~~ An apparatus for the prevention of damage inside the printing machine caused by microwave radiation emanating from microwave mechanisms (3), preferably microwave fuser mechanisms, comprising: at least one detection mechanism for the detection of an undesired effect of microwave radiation, and at least one mechanism for the execution of suitable countermeasures in response to detection of an undesired effect by said at least one detection mechanism, wherein at least one electrical discharge detection mechanism (9) is provided in the area of said microwave mechanism (3), said electrical discharge detection mechanism (9) includes including at least one optical sensor.

29. **(Currently Amended)** ~~An apparatus according to Claim 27,~~
~~wherein~~ An apparatus for the prevention of damage inside the printing machine
caused by microwave radiation emanating from microwave mechanisms (3),
preferably microwave fuser mechanisms, comprising: at least one detection
mechanism for the detection of an undesired effect of microwave radiation, and at
least one mechanism for the execution of suitable countermeasures in response to
detection of an undesired effect by said at least one detection mechanism, wherein at
least one electrical discharge detection mechanism (9) is provided in the area of said
microwave mechanism (3), said electrical discharge detection mechanism (9) includes
including at least one electrical diode (17) for detecting changes in said electric field
inside said microwave mechanism (3).

30. **(Currently Amended)** ~~An apparatus according to Claim 27,~~
~~wherein~~ An apparatus for the prevention of damage inside the printing machine
caused by microwave radiation emanating from microwave mechanisms (3),
preferably microwave fuser mechanisms, comprising: at least one detection
mechanism for the detection of an undesired effect of microwave radiation, and at
least one mechanism for the execution of suitable countermeasures in response to
detection of an undesired effect by said at least one detection mechanism, wherein at
least one electrical discharge detection mechanism (9) is provided in the area of said
microwave mechanism (3), said electrical discharge detection system (9) includes
including at least one acoustical sensor.